#### **REMARKS**

Claims 1-49 remain pending in the application. Claims 3, 5, 6, 8, 14, 15, 16, 22, 24, 25, 27, 33, 34, 35, 41, 43, 45, and 46 have been amended. New claims 50 and 51 have been added. Support for the amendments and new claims can be found in the specification. In particular for the new claims 50 and 51, support for the limitation of "said plant further comprises genetic or cytoplasmic male sterility" can be found in the specification as filed, starting on line 34 of page 1 and continuing through line 14 on page 3. No new matter has been added by amendment or addition of new claims. Reconsideration of the claims as amended is respectfully requested.

## **CLAIM OBJECTIONS**

- 1) Examiner objects to claims 1, 6, 21, 25, 37, and 40 for the inclusion of a blank line where the ATCC accession number should be included. Applicants respectfully submit that the pertinent claims will be amended at such time the actual deposit has been made as set forth in 37 CFR §§ 1.801-1.809. Once notice of allowable claims has been received by Applicants, a deposit will be made with the ATCC and the claims will be amended to recite the accession number.
- 2) Examiner objects to claims 8 and 27 under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should only refer to other claims in the alternative. Objection is duly noted by Applicants and claims 8 and 27 have been amended as suggested by the Examiner.

#### REJECTIONS UNDER 37 C.F.R. 1.130(b)-DOUBLE PATENTING

3) Examiner rejects claims 1-17 and 21-46 under the "doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Patent No. 6,188,001 B1." Examiner states, "Although the conflicting claims are not identical, they are not patentably distinct from each other because they both appear to be drawn to the same maize inbred line. The instantly claimed inbred line and that of 6,188,001 (PH1W0) share numerous traits, or differ due to minor morphological variations that would be expected to occur in different progeny of the same cultivar, and wherein said minor morphological variation would not confer a patentable distinction to PH3PG." Applicants respectfully contest this rejection as inappropriate. The inventions PH3PG and PH1W0 are not the same inventions nor are their differences "minor morphological variations". Applicants submit that the claimed plant PH3PG cannot be rendered obvious

or lacking novelty as it possesses a unique combination of traits which confers a unique combination of genetics.

The inventions PH3PG and PH1W0 differ for various traits that are not minor. Nor are they expected to occur in different progeny of the same cultivar. For example PH3PG has better stalk lodging resistance when compared to PH1W0. As reported in Tables 2A-2D on pages 37-40 of the specification PH3PG demonstrates 0-2% stalk lodging occurrence. As reported in the Tables 2A-2C in columns 27-29, of the 6,188,001 patent, PH1W0 demonstrates 5-6% stalk lodging occurrence. And as reported in Tables 3, 4A, and 4B on pages 41-42 of the specification, PH3PG demonstrates average to 5% above average for stalk lodging resistance in hybrid combinations. And as reported in Tables 3A, 3B, and 4A-4C in columns 31-35 of the 6,188,001 patent PH1W0 demonstrates 2-7% below average for stalk lodging resistance.

The inventions also differ for yield. Tables 2A-2D on pages 37-40 of the specification report that PH3PG yields ranged from 16-28% below average. Tables 2A-2C in columns 27-29, of the 6,188,001 patent, report that PH1W0 yields ranged from 18-29% above average. In hybrid combinations, PH3PG yielded 136.1 and 137.4 bushels per acre (Table 4A and 4B, pages 42 and 43 of the specification). In hybrids combinations, PH1W0 yielded 172.9-188.1 bushels per acre (Tables 4A-4C, columns 33-35 of patent 6,188,001).

The following table notes some of the differences between inbred maize line PH3PG and the inbred maize line PH1W0. This information can be found in Table 1 on pages 17-19 of the specification and in columns 12-15 of the 6,188,001 patent. The Applicant would like to particularly point out the differences in the days to 50% silk and pollen, and Staygreen ratings.

PH3PG	PH1W0
60 days from emergence to 50% plants in silk	71 days from emergence to 50% plants in silk
61 days from emergence to 50% plants in pollen	70 days from emergence to 50% plants in pollen
1,034.3 heat units from emergence to 50% plants in silk	1,304.9 heat units from emergence to 50% plants in silk
1,052.6 heat units from emergence to 50% plants in pollen	1,293.0 heat units from emergence to 50% plants in pollen
174.4 cm = plant height	207.5 cm = plant height
62.4 cm = ear height	83.0 cm = ear height
4 = anthocyanin of brace roots	2 = anthocyanin of brace roots
White = cob color	Red = cob color
2 = Staygreen rating	5 = Staygreen rating
3,402 = kg/ha yield	5,284 = kg/ha yield

The examples and the list are not exhaustive but they give ample evidence that the inventions are not the same. Nor are they minor variations of each other.

In light of the above remarks, Applicants respectfully request the Examiner withdraw the rejection to claims 1-17 and 21-46 under 37 CFR 1.130(b).

## REJECTIONS UNDER 35 U.S.C. § 112, SECOND PARAGRAPH

- 4) Examiner rejects claims 3 and 22 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Examiner states "The claims are indefinite because they require the plants of the claim from which they depend to be male sterile. However, the plants recited in claims 2 and 20, namely plants having all the morphological and physiological characteristics of the deposited line, aren't defined in the specification as being male sterile." The Applicants assume the Examiner was referring to claims 2 and 21 rather than 2 and 20 and is responding accordingly. The Applicants have amended claims 3 and 22 and added claims 50 and 51, thus obviating this ground of rejection. The Applicants submit that though the deposited line is not male sterile, claims 3, 22, 50 and 51 are submitted as part of the invention because they constitute a variation of the invention which is well known to one skilled in the art of plant breeding and seed production. Inbreds are routinely made male sterile by physically removing the tassel from the plant or by routine plant breeding methods of moving nuclear genes or cytoplasmic genes from one cultivar to another (Poehlman et al., 1995, page 332 (A9) also see line 34 of page 1 through line 14 of page 3 of specification). Applicants respectfully ask Examiner for withdrawal of rejection in light of arguments and amendments.
- 5) Examiner rejects claims 4, 5, 23, and 24 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Examiner states "claims are indefinite because they fail to specify which characteristics are present in the tissue culture, and so fail to adequately characterize the tissue culture." Applicants respectfully traverse this rejection. Claims 4 and 23 distinctly claim a tissue culture of regenerable cells derived from the plant of claim 2 and claim 21, respectively. The plant of claim 2 and 21 is clearly defined within the specification. For example, the physiology and morphology of the plant is described in Table 1 on pages 17-19 of the specification, and a deposit of the seed of the plant of claims 2 and 21 will be made. One of ordinary skill

in the art will clearly understand the plants and their derived tissue culture being claimed by Applicants.

As stated in MPEP 2173.02, "The essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and precision." One of the criteria for satisfaction of this requirement is "the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made." Id. As stated above, one of ordinary skill in the art will clearly understand what is meant by tissue culture. Additionally, the deposit of PH3PG adds a high degree of clarity and precision to the claim. See *In re Argoudelis*, 434 F.2d 666,168 USPQ 99 (CCPP 1970). Thus, claims 4 and 23 distinctly claim the subject matter, which the Applicants regard as their invention, and claims 5 and 24 are proper claims depending therefrom. Applicants ask for reconsideration and withdrawal of this rejection.

- 6) Examiner rejects claims 1-49 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Examiner states "Amending claims 1, 6, 21, 25, 37, and 40 to recite the ATCC deposit number in which seed of maize inbred line PH3PG has been deposited would overcome the rejection." Applicants respectfully submit that the pertinent claims will be amended at such time the actual deposit has been made as set forth in 37 CFR §§ 1.801-1.809. Once notice of allowable claims has been received by Applicants, a deposit will be made with the ATCC and the claims will be amended to recite the accession number.
- 7) Examiner rejects claims 6 and 25 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Examiner states that the Applicants' use of "capable of expressing" in lines 1-2 of claims 6 and 25 is indefinite and, Examiner suggests the deletion of the words "capable of". The Applicants have deleted the phrase "capable of expressing all the morphological and physiological characteristics of inbred line PH3PG, representative seed of which have been deposited under the ATCC Accession No. \_\_\_\_\_\_." For example, claim 6 as now amended refers to a plant regenerated from the tissue culture of claim 4, which is a tissue culture of regenerable cells from the plant of claim 2. As previously stated, the plant of claim 2 and 21 is clearly defined within the specification. For example, the physiology and morphology of the plant is described in Table 1 on pages 17-19 of the specification, and a deposit of

the seed of the plant of claims 2 and 21 will be made. One of ordinary skill in the art will clearly understand the tissue culture and the maize plants regenerated from that tissue culture being claimed by Applicants. As stated in MPEP 2173.02, "The essential inquiry pertaining to this requirement is whether the claims set out and circumscribe a particular subject matter with a reasonable degree of clarity and precision." One of the criteria for satisfaction of this requirement is "the claim interpretation that would be given by one possessing the ordinary level of skill in the pertinent art at the time the invention was made." Id. As stated above, one of ordinary skill in the art will clearly understand what is meant by tissue culture and of a maize plant regenerated from that tissue culture. Additionally, the deposit of PH3PG adds a high degree of clarity and precision to the claim. *In re Argoudelis*, 434 F.2d 666,168 USPQ 99 (CCPP 1970). Thus claims 4 and 23 distinctly claim the subject matter which the Applicants regard as their invention. Accordingly, claims 5 and 24 are proper dependent claims and are subject to all the limitations of the claims on which they depend. In light of amendment, Applicants ask for reconsideration and withdrawal of this rejection.

- 8) The Examiner rejects claims 5 and 24 and suggests that the recitation "the cells of protoplasts being" be replaced with "wherein cells or protoplasts are derived". These claims have been amended and read as follows. The tissue culture according to claim 4 (23), cells or protoplasts of the tissue culture being from a tissue source selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks. As stated in the MPEP 2173.05(e), inherent components of elements recited have antecedent basis in the recitation of the components themselves. For example, the recitation 'the outer surface of said sphere' would not require antecedent recitation that the sphere has an outer surface." Similarly, cells or protoplasts are inherent components of a tissue culture and would not require an antecedent recitation. In light of amendment, Applicants request reconsideration and withdrawal of this rejection.
- 9) The Examiner rejects claims 14, 33, 41, 45, and 46 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner writes "The claims are indefinite because of they do not indicate the 'standards' against which the listed traits should be compared to determine the resistance to root lodging, resistance to stalk lodging, yield etc. The claimed plants have only two characteristics of PH3PG. It is not clear what type of plants the claimed plants should be compared to

in order to determine the characteristics listed in the claim. In addition, the recitations of 'good', 'early', 'low', 'high', and 'above average' are unduly narrative, and when not associated with a specific numerical value, have no art-recognized meaning." Applicants have amended claims 14, 33, 41, 45, and 46 thus obviating this ground for rejection. Applicants have amended the claims using the term "not significantly different from PH3PG when determined at a 5% significance level..." as a definitive term. In the specification pages 35-43, the tables and the written descriptions of the tables show mean trait values, including stalk lodging resistance, root lodging resistance, harvest moisture, yield, and early season growth, as being significantly different when tested at the 5% significance level. The standards against which the listed traits should be compared are the mean values for those traits exhibited by PH3PG or a PH3PG-derived line in a side-by-side comparison or other similar environmental conditions. For example, on page 35 lines 3-4 of the specification it states that "PH3PG demonstrates significantly lower harvest moisture and significantly higher test weight of grain than inbred PHFA5" when discussing Table 2A. The discussions of Tables 3, 4A, and 4B on pages 35-36 report significant differences in test weight, harvest moisture, yields, and maturity between PH3PG hybrids and other hybrids. The Applicants would also like to point out that one of ordinary skill in the art of plant breeding would know how to evaluate the traits of two inbred maize lines to determine if they are not significantly different to a 5% significance level in the expression of a given trait. On pages 275-276 in Principles of Cultivar Development (1987) Fehr writes "Two or more independent comparisons of lines in a test provide a means of estimating whether variation in performance among lines is due to differences in genetic potential or to environmental variation." A copy of Fehr, pages 261-286, is attached to this Amendment and Request for Reconsideration as Appendix A. As was done by Applicants in the specification, mean trait values would be used to determine whether the trait differences are significant. Further, the claims, as amended, require that the traits be measured on plants grown in the same environmental conditions. Given the amendment to the claims and supporting discussion, Applicants submit that the claims are definite and requests that the Examiner reconsiders and withdraws the rejection.

The Examiner also states, "the recitation 'Northcentral region of the United States' is also indefinite, since the specification does not define the states that make up this region. It is therefore not clear how one would determine if the claimed plant is particularly suited to it." Applicants respectfully traverse the rejection. The Applicants

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point out that the region is well known to one of ordinary skill in the art. Applicants ask for reconsideration and withdrawal of the rejection.

- 10) The Examiner rejects claims 15-17 and 34-36 under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner states "Claims 15 and 34 are drawn to a method for developing a maize plant in a plant breeding program, and the claims indicate that the indicated maize plant, or its parts, would be used as a source of breeding material. However, the claims are indefinite because they do not set forth any specific method steps with regard to how the maize plant or parts would be developed. All that is indicated is that it would be used." Claims 15 and 34 have been amended to recite that in addition to obtaining plants, the method includes "employing said plant or parts as a source of breeding material using plant breeding techniques." Various breeding techniques for employing said plant or plant parts as a source of breeding material are well known in the art and many of such techniques are described on pages 3-4 of the specification. These amendments obviate the rejection.
- 11) The Examiner rejects claims 16 and 35 under 35 U.S.C. §112, second paragraph. The Examiner points out that "The claims are indefinite because they refer to the maize breeding program of the claim from which they depend, whereas those claims are drawn to a method for developing a maize plant." Applicants thank the Examiner for pointing this out and claims 16 and 35 have been amended to refer to "the method" of the previous claims. The withdrawal of the rejection is respectfully requested.
- 12) The Examiner rejects claims 17, 36, and 43 under 35 U.S.C. §112, second paragraph. The Examiner states, "The claims are indefinite in that it is unclear what would constitute the maize plants and parts, given that they are the products of multiple crosses and it is unclear what characteristics said plants and plant parts would have. With regard to claims 17 and 36, it remains unclear how many generations would be encompassed by the breeding program of the claim from which they depend."

  Applicants respectfully traverse the Examiner's grounds for rejection. Claims 17, 36, and 43 clearly state that somewhere in the breeding process, regardless of the breeding techniques used, inbred line PH3PG must be used. For claims 17, and 36 the number of generations the claimed plant resides from the starting material is not a factor, as long as the end product was developed by use of the invention.

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The amended claim 43 now clearly claims the "further PH3PG-derived maize plant". It is now clear that the further PH3PG-derived maize plant will be derived from inbred line PH3PG, which has been clearly described both within the specification and by seed deposit. Thus, claims 17, 36, and 43 are definite because only plants developed through the use of PH3PG are within the scope of the claims and PH3PG has been clearly described by both deposit and text in the specification. Applicants respectfully request that this rejection be withdrawn.

13) The Examiner rejects claim 43 under 35 U.S.C. §112, second paragraph. The Examiner points out that there is no antecedent for the recitation "A further derived maize plant". The Examiner suggests that the recitation be replaced with "A PH3PG-derived plant". Claim 43 has been amended to read "The further PH3PG-derived maize plant" and the Examiner is thanked for his suggestion.

# **REJECTIONS UNDER 35 U.S.C. § 112, FIRST PARAGRAPH**

14) The Examiner rejects claims 1-49 under 35 U.S.C. §112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Examiner points out that the seed is essential to the claimed invention and Applicants must deposit seeds for PH3PG at the ATCC.

With regard to the deposit of inbred line PH3PG, Applicants wish to note that:

- (a) during the pendency of this application access to the invention will be afforded to the Commissioner upon request:
- (b) all restrictions upon availability to the public will be irrevocably removed upon granting of the patent;
- (c) the deposit will be maintained in a public depository for a period of thirty years, or five years after the last request for the enforceable life of the patent, whichever is longer;
- (d) a test of viability of the biological material at the time of deposit will be conducted (see 37 C.F.R. § 1.807); and
- (e) the deposit will be replaced if it should ever become inviable.
  - Applicants wish to state that the actual ATCC deposit will be delayed until the receipt of notice of otherwise allowable subject matter. Once such notice is received, an ATCC deposit will be made, and the claims will be amended to recite the ATCC deposit number. In addition, Applicants submit that at least

2,500 seeds of PH3PG will be deposited with the ATCC on or before the date of payment of the issue fee. In view of this assurance, the rejection under 35 U.S.C. § 112, first paragraph should be removed (MPEP 2411.02). Such action is respectfully requested.

# REJECTIONS UNDER 35 U.S.C. §§ 102 and 103

15) The Examiner rejects claims 1-17 and 21-46 under 35 U.S.C. § 102(e) as anticipated by or, in the alternative, under 35 U.S.C. § 103 (a) as obvious over Piper (U.S. Patent No. 6,188,001 B1). The Examiner notes that "It appears that the claimed plants and seeds of the instant invention may be the same as PH1W0, given that each has a light green glume color, buff dry husk color, have a pink anther color, high yields, and are adapted to the Northcentral region of the United States, for example (Table 1; col. 10, lines 50-62). Alternatively, if the claimed plants, plant parts, and seeds of PH3PG are not identical to PH1W0, then it appears that PH1W0 only differs from the claimed plants, plant parts, and seeds due to minor morphological variation, wherein said minor morphological variation would be expected to occur in different progeny of the same cultivar, and wherein said minor morphological variation would not confer a patentable distinction to PH3PG.

Applicants respectfully traverse this rejection. Once again Applicants would like to point out that the inventions PH3PG and PH1W0 are not the same inventions. Nor are their differences "minor morphological variations". Applicants submit that the claimed plant cannot be rendered obvious or lacking novelty as it possesses a unique combination of traits which confers a unique combination of genetics.

The inventions PH3PG and PH1W0 differ for various traits that are not minor. Nor are they expected to occur in different progeny of the same cultivar. For example PH3PG has better stalk lodging resistance when compared to PH1W0. As reported in Tables 2A-2D on pages 37-40 of the specification PH3PG demonstrates 0-2% stalk lodging occurrence. As reported in the Tables 2A-2C in columns 27-29, of the 6,188,001 patent, PH1W0 demonstrates 5-6% stalk lodging occurrence. And as reported in Tables 3, 4A, and 4B on pages 41-42 of the specification, PH3PG demonstrates average to 5% above average for stalk lodging resistance in hybrid combinations. And as reported in Tables 3A, 3B, and 4A-4C in columns 31-35 of the 6,188,001 patent PH1W0 demonstrates 2-7% below average for stalk lodging resistance.

The inventions also differ for yield. Tables 2A-2D on pages 37-40 of the specification report that PH3PG yields ranged from 16-28% below average. Tables 2A-2C in columns 27-29, of the 6,188,001 patent, report that PH1W0 yields ranged from 18-29% above average. In hybrid combinations, PH3PG yielded 136.1 and 137.4 bushels per acre (Table 4A and 4B, pages 42 and 43 of the specification). In hybrids combinations, PH1W0 yielded 172.9-188.1 bushels per acre (Tables 4A-4C, columns 33-35 of patent 6,188,001).

The following table notes some of the differences between inbred maize line PH3PG and the inbred maize line PH1W0. This information can be found in Table 1 on pages 17-19 of the specification and in columns 12-15 of the 6,188,001 patent. Applicants would like to particularly point out the differences in the days to 50% silk and pollen, and Staygreen ratings.

PH3PG	PH1W0
60 days from emergence to 50% plants in silk	71 days from emergence to 50% plants in silk
61 days from emergence to 50% plants in pollen	70 days from emergence to 50% plants in pollen
1,034.3 heat units from emergence to 50% plants in silk	1,304.9 heat units from emergence to 50% plants in silk
1,052.6 heat units from emergence to 50% plants in pollen	1,293.0 heat units from emergence to 50% plants in pollen
174.4 cm = plant height	207.5 cm = plant height
62.4 cm = ear height	83.0 cm = ear height
4 = anthocyanin of brace roots	2 = anthocyanin of brace roots
White = cob color	Red = cob color
2 = Staygreen rating	5 = Staygreen rating
3,402 = kg/ha yield	5,284 = kg/ha yield

The examples and the list are not exhaustive but they give ample evidence that the inventions are not the same. Nor are they minor variations of each other.

The Examiner also states that amending claims to include ATCC accession number will overcome the rejection for claims 1-13, 15-17, 21-32, 34-40, and 42-44. The Applicants would like to stress that at the time of the notice of allowable claims such ATCC number will be entered.

The Examiner goes on to state that "even with the inclusion of the ATCC number, the plants of claims 14, 33, 41, 45, and 46 are still taught by Piper, as inbred line PH1W0 has at least two of the characteristics of PH3PG listed in those claims. The process of making the claimed plants does not distinguish the plants themselves from those taught by the reference. Thus, the claimed invention was clearly *prima facie* obvious as a whole to one of ordinary skill in the art, if not anticipated by Piper."

The Applicants respectfully disagree with the Examiner. Applicants submit that though PH3PG and PH1W0 exhibit some similar traits, what is being claimed is not the trait but the unique combination of alleles contained in PH3PG. It is this unique combination of genetics and traits in PH3PG that will give rise to the claimed plants resulting from breeding with this material.

As discussed above, PH3PG is clearly differentiated from PH1W0. Further, plants derived from PH3PG are also clearly differentiated. It must be recognized that the PH3PG-derived plants are themselves unusual and a nonobvious result of a combination of previously unknown and nonobvious genetics. In addition to the phenotypic traits described herein, each PH3PG-derived plant has an additional benefit unique to each specific cross using PH3PG as one of its ancestors. Thus, they deserve to be considered new and nonobvious compositions in their own right as products of crossing when PH3PG is used as a starting material.

In light of the above, Applicants respectfully request that the Examiner reconsider and withdraw the rejection to claims 1-17 and 21-46 under 35 U.S.C. §§ 102(e) and 103(a).

#### CONCLUSION

Attached hereto is a marked-up version of the changes made to the specification and claims by current amendment. The attached page is captioned "VERSION WITH MARKINGS TO SHOW CHANGES MADE".

Applicants submit that in light of the foregoing amendments and remarks, that claims 1-49, as amended, and new claims 50 and 51, are in condition for allowance. Reconsideration and early notice of allowability is respectfully requested. If it is felt that it would aid in prosecution, the Examiner is invited to contact the undersigned at the number indicated to discuss any outstanding issues.

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# **VERSION WITH MARKINGS TO SHOW CHANGES MADE**

## In the claims

Claims 3, 5, 6, 8, 14,15, 16, 22, 24, 25, 27, 33, 34, 35, 41, 43, 45, and 46 have been amended as follows:

- 3. (Amended) The maize plant of claim 2, wherein said plant [is] <u>has been manipulated</u> to be male sterile.
- 5. (Amended) [A] <u>The</u> tissue culture according to claim 4, [the] cells or protoplasts <u>of the tissue culture</u> being from a tissue <u>source</u> selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.
- 6. (Amended) A maize plant regenerated from the tissue culture of claim 4[, capable of expressing all the morphological and physiological characteristics of inbred line PH3PG, representative seed of which have been deposited under ATCC Accession No.
- 8. (Amended) The method of claim 7 wherein the inbred maize plant [of claim 2] produced by growing the seed of inbred line PH3PG, is the female or male parent.
- 14. (Amended) A maize plant, or parts thereof, wherein at least one ancestor of said maize plant is the maize plant of claim 2, said maize plant expressing a combination of at least two traits which are not significantly different from PH3PG when determined at a 5% significance level and when grown in the same environmental conditions, said traits selected from the group consisting of: a [relative] maturity of [approximately] 81 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, [good] stalk lodging resistance, [good] root lodging resistance, [good] test weight, [early] maturity, [low] harvest moisture, [high yields] <u>yield</u>, [above average] early season growth and [is adapted] <u>adaptability</u> to the Northcentral region of the United States and Southern Manitoba, Canada.
- 15.(Amended) A method for developing a maize plant in a maize plant breeding program [using plant breeding techniques, which include employing a maize plant, or its

parts, as a source of plant breeding material,] comprising: obtaining the maize plant, or its parts, of claim 2 [as a source of said breeding material.]; and employing said plant or parts as a source of breeding material using plant breeding techniques.

16.(Amended) The [maize plant breeding program] <u>method</u> of claim 15 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

22.(Amended) The maize plant of claim 21, wherein said plant [is] <u>has been manipulated</u> to be male sterile.

24. (Amended) [A] <u>The</u> tissue culture according to claim 23, [the] cells or protoplasts <u>of</u> the tissue culture being from a tissue <u>source</u> selected from the group consisting of leaves, pollen, embryos, roots, root tips, anthers, silks, flowers, kernels, ears, cobs, husks, and stalks.

25. (Amended) A maize plant regenerated from the tissue culture of claim 23[, capable of expressing all the morphological and physiological characteristics of inbred line PH3PG, representative seed of which have been deposited under ATCC Accession No. \_\_\_\_\_].

- 27. (Amended) The method of claim 26 wherein the [inbred maize] plant [of claim 21] having all the physiological and morphological characteristics of inbred line PH3PG is the female or male parent.
- 33. (Amended) A maize plant, or parts thereof, wherein at least one ancestor of said maize plant is the maize plant of claim 21, said maize plant expressing a combination of at least two <u>traits which are not significantly different from PH3PG when determined at a 5% significance level and when grown in the same environmental conditions, said traits selected from the group consisting of: a [relative] maturity of [approximately] 81 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, [good] stalk lodging resistance, [good] root lodging resistance, [good] test weight, [early] maturity, [low] harvest moisture, [high yields] <u>yield</u>, [above average] early season growth</u>

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and [is adapted] <u>adaptability</u> to the Northcentral region of the United States and Southern Manitoba, Canada.

34.(Amended) A method for developing a maize plant in a maize plant breeding program [using plant breeding techniques, which include employing a maize plant, or its parts, from a source of plant breeding material,] comprising: obtaining the maize plant, or its parts, of claim 21 [from a source of said breeding material.]; and employing said plant or parts from a source of breeding material using plant breeding techniques.

35.(Amended) The [maize plant breeding program] <u>method</u> of claim 34 wherein plant breeding techniques are selected from the group consisting of: recurrent selection, backcrossing, pedigree breeding, restriction fragment length polymorphism enhanced selection, genetic marker enhanced selection, and transformation.

41. (Amended) A PH3PG-derived maize plant, or parts thereof, produced by the method of claim 40, said PH3PG-derived maize plant expressing a combination of at least two traits which are not significantly different from PH3PG when determined at a 5% significance level and when grown in the same environmental conditions, said traits selected from the group consisting of: a [relative] maturity of [approximately] 81 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, [good] stalk lodging resistance, [good] root lodging resistance, [good] test weight, [early] maturity, [low] harvest moisture, [high yields] <u>yield</u>, [above average] early season growth and [is adapted] <u>adaptability</u> to the Northcentral region of the United States and Southern Manitoba, Canada.

43.(Amended) [A] <u>The</u> further [derived] <u>PH3PG-derived</u> maize plant, or parts thereof, produced by the method of claim 42.

45. (Amended) A PH3PG-derived maize plant, or parts thereof, produced by the method of claim 44, said PH3PG-derived maize plant expressing a combination of at least two traits which are not significantly different from PH3PG when determined at a 5% significance level and when grown in the same environmental conditions, said traits selected from the group consisting of: a [relative] maturity of [approximately] 81 based on the Comparative Relative Maturity Rating System for harvest moisture of grain,

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[good] stalk lodging resistance, [good] root lodging resistance, [good] test weight, [early] maturity, [low] harvest moisture, [high yields] <u>yield</u>, [above average] early season growth and [is adapted] <u>adaptability</u> to the Northcentral region of the United States and Southern Manitoba, Canada.

46. (Amended) A further PH3PG-derived maize plant, or parts thereof, of claim 43, wherein said further PH3PG-derived maize plant or parts thereof, express a combination of at least two traits which are not significantly different from PH3PG when determined at a 5% significance level and when grown in the same environmental conditions, said traits selected from the group consisting of: a [relative] maturity of [approximately] 81 based on the Comparative Relative Maturity Rating System for harvest moisture of grain, [good] stalk lodging resistance, [good] root lodging resistance, [good] test weight, [early] maturity, [low] harvest moisture, [high yields] <u>yield</u>, [above average] early season growth and [is adapted] <u>adaptability</u> to the Northcentral region of the United States and Southern Manitoba, Canada.

New claims 50 and 51 have been added.

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